	,																														
Time Stamp	2004/10/19 16:50	2004/10/19 16:50	2004/10/19 16:55	2004/10/19 16:51	2004/10/19 16:51	2004/10/19 16:51	2004/10/19 16:52	2004/10/19 16:52	2004/10/19 16:52	2004/10/19 16:53	2004/10/19 16:56	2004/10/19 16:57	2004/10/20 13:30	2004/10/20 13:30	2004/10/20 13:30	2004/10/20 13:31	2004/10/20 13:38	2004/10/20 13:38	2004/10/20 13:39	2004/10/20 13:39	2004/10/20 13:42	2004/10/20 13:40	2004/10/20 13:42	2004/10/20 13:42	2004/10/20 13:44	2004/10/20 13:44	2004/10/20 13:46	2004/10/20 16:52	2004/10/20 16:53	2004/10/20 16:53	2004/10/20 16:54
Plurals	PF.	OFF.	OFF	OFF	OFF.	FF.	OFF.	FFO	OFF.	FF	OFF.	OFF	P.	OFF	PP.	OFF	OFF.	OFF	띪	Æ	OFF	PF.	늉	ド	9FF	PF	OFF	PF0	OFF	OFF	OFF
Default Operator	ğ	ğ	క	క	ğ	Ř	æ	æ	g	g	æ	æ	R	క	æ	ğ	æ	Ř	శ	8	ğ	g	క	8	8	æ	8	క	శ	8	ĕ
DBs	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT
Search Query	phase near tocked near loop	phase near frequency near detector	phase near polarity near counter	charage near pump	charge near pump	voltage near controll\$2 near oscillator	S1 and S2 and S4 and S6 and S7	S1 and S2 and S7	S9 and S6	S10 and S4	S10 and (reference near oscillator)	S12 and S4	phase near lock\$2 near loop	(phase and frequency) near detector	phase near error near signal	phase near error near (signal or generator)	gain near signal	voltage near controll\$2 near oscillator	826	control near signal	S21 and S22 and S24 and S25 and S26 and S18	S21 and S22 and S24 and S25 and S26 and S28	S21 and S22	S31 and Ipump	reference near oscillator	S33 and S22	S34 and S23	phase near error near (generator or signal)	voltage near charge near oscillator	voltage near controll\$2 near oscillator	gain near signal
吾	21072	1761	S	1	8456	19861	0	1057	285	0	61	0	56209	1534	2854	2875	11984	19861	19861	230362	7	4	1167	-	5934	790	24	2875	2	19861	11984
# Ref	SI	S	22	S	88	25	8	83	210	S11	S12	S13	521	275	823	S24	S25	925	227	828	823	g	83	232	233	83 4	SS	236	237	88	833

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8	5934	reference near oscillator	USPAT	క	붠	2004/10/20 16:54
쥸	E1	S36 and S38 and S39 and S40	USPAT	క	OFF.	2004/10/20 16:56
245	56209	phase near lock\$2 near loop	USPAT	g	OFF	2004/10/20 16:57
22	11	S42 and S41	USPAT	g	胀	2004/10/20 16:57
*	2471	S40 and S42	USPAT	æ	H	2004/10/20 17:13
S45	232	S44 and S36	USPAT	8	PF	2004/10/20 17:14
\$	0	S45 and S37	USPAT	೪	H	2004/10/20 17:14
24	180	S45 and S38	USPAT	g	OFF	2004/10/20 17:14
₹	ß	S47 and threshold	USPAT	g	FFO.	2004/10/20 17:15
\$49	ß	S48 and phase near error	USPAT	g	FPO	2004/10/20 17:15
SS .	0	S48 and S49 and compare near (threshold or phase near error)	USPAT	ĕ	OFF.	2004/10/20 17:15
S51	ß	S48 and S49	USPAT	g	R	2004/10/20 17:16
222	45	S51 and control near signal	USPAT	8	OFF	2004/10/20 17:16
223	. 7	S52 and gain near signal	USPAT	8	PF.	2004/10/20 17:16
S54	45	S52 and S40	USPAT	8	PF	2004/10/20 17:17
SSS	36	SS4 and phase near locked near loop	USPAT	ĕ	H	2004/10/20 17:17
S26	21072	phase near locked near loop	USPAT	ĕ	OFF	2004/10/20 17:33
257	1534	(phase and frequency) near detector	USPAT	క	-FIO	2004/10/20 17:33
828	19026	164	USPAT	ĕ	PF0	2004/10/20 18:01
S29	28006	pll or phase near locked near loop	USPAT	ő	PF	2004/10/20 18:02
98	1344	S59 and lag and lead	USPAT	ĕ	OFF	2004/10/20 18:02
Se	384	S60 and gain and reference near signal	USPAT	క	FP.	2004/10/20 18:02
S62	=	S61 and first near gain and second near gain	USPAT	Ř	H	2004/10/21 15:33
88	25468	S61 and voltage nera controlled near oscillator	USPAT	8	OFF	2004/10/20 18:13
2 8	267	S61 and voltage near controlled near oscillator	USPAT	ĕ	OFF	2004/10/20 18:13
S65	7	S64 and S62	USPAT	8	OFF	2004/10/20 18:13
98	28006	pll or phase near locked near loop	USPAT	8	OFF	2004/10/21 11:07
292	28006	995	USPAT	8	OFF	2004/10/21 11:08
8 8	479	first near gain near signal	USPAT	ĕ	OFF	2004/10/21 11:08
69S	418	second near gain near signal	USPAT	ళ	OFF	2004/10/21 11:08
820	14	See and Se8 and Se9	USPAT	ಕ	OFF	2004/10/21 11:24
571	5518	first near gain	USPAT	8	OFF	2004/10/21 11:24
<i>S72</i>	4707	second near gain	USPAT	ಕ	OFF	2004/10/21 11:24

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2004/10/21 11:25	2004/10/21 11:25	2004/10/21 11:25	2004/10/21 11:36	2004/10/21 11:37	2004/10/21 11:37	2004/10/21 11:38	2004/10/21 11:41	2004/10/21 11:42	2004/10/21 11:43	2004/10/21 11:42	2004/10/21 11:42	2004/10/21 11:50	2004/10/21 11:53	2004/10/21 11:54	2004/10/21 11:55	2004/10/21 11:55	2004/10/21 11:55	2004/10/21 11:56	2004/10/21 11:56	2004/10/21 11:57	2004/10/21 11:57	2004/10/21 11:57	2004/10/21 15:20	2004/10/21 15:20	2004/10/21 15:20	2004/10/21 15:20	2004/10/21 15:20	2004/10/21 15:20	2004/10/21 15:37	2004/10/21 15:38
OFF	OFF	OFF	P.	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	- OFF	H	OFF	OFF	OFF	OFF	OFF.	PF0	胀
S.	g	æ	Ř	Ř	g	æ	ਲ	ĕ	g	8	8 W	క	g	æ	క	8	g	g	ĕ	R	g	8	æ	క	æ	క	æ	క	క	æ
USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT
first near reference	second near reference	control near signal	See and S71 and S72 and S73 and S74 and S75	(first and second) near reference near signal	S66 and S77 and S75	S78 and S68 and S69	S78 and S71 and S72	(lead and lag) near error	S66 and S81	S82 and S68 and S69	S82 and S71 and S72	(phase and frequency) near detector	285	S85 and S81	compare and input and lead and lag	Se6 and S88	error near signal	S89 and S90	S91 and S71 and S72	S91 and error and gain and control and reference	S93 and reference near signal	S94 and control near signal and voltage near controlled near oscillator	pil or phase near locked near loop	compare and input and lead and lag	S96 and S97	error near signal	S98 and S99	S100 and error and gain and control and reference	S101 and reference near signal	(phase and frequency) near detector
63053	37245	230362	φ	2239	242	7	2	88	19	0	0	1534	1534	S	1789	339	51034	169	2	116	8	64	28006	1789	339	51034	169	116	8	1534
573	S74	S7.S	S76	<i>S77</i>	878	S79	88	88	285	88	82	88	% %	287	88	88	286	291	265	293	82	292	286	265	288	88	S10 0	S10	S10	S10

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S10	1534	S103	USPAT	æ	OFF	2004/10/21 15:38
S10	5934	reference near oscillator	USPAT	%	FF0	2004/10/21 15:38
S10 6	5934	S105	USPAT	æ	HO.	2004/10/21 15:38
S10 7	23436	gain and reference near signal	USPAT	æ	FF0	2004/10/21 15:41
S10 8	230362	control near signal	USPAT	æ	OFF	2004/10/21 15:41
S10 9	284	S108 and S107 and S103 and S96	USPAT	æ	OFF	2004/10/21 15:41
S11 0	14191	lead and lag	USPAT	ĸ	FF0	2004/10/21 15:42
S11 1	82	S109 and S110	USPAT	Ŗ	HO.	2004/10/21 15:42
S11 2	2875	phase near error near (generator or signal)	USPAT	8	PFO	2004/10/21 16:21
S11 3	19861	voltage near controll\$2 near oscillator	USPAT	ĸ	HO.	2004/10/21 16:21
S11 4	5934	reference near oscillator	USPAT	8	HO.	2004/10/21 16:21
S11 ·	26209	phase near lock\$2 near loop	USPAT	ĸ	H ₀	2004/10/21 16:21
S11 6	2471	S114 and S115	USPAT	8	FFO	2004/10/21 16:21
S11 7	232	S116 and S112	USPAT	æ	FFO	2004/10/21 16:21
S11 8	180	S117 and S113	USPAT	æ	PF0	2004/10/21 16:21
S11 9	S	S118 and threshold	USPAT	R	OFF.	2004/10/21 16:21
S12 0	21072	phase near locked near loop	USPAT	S.	OFF	2004/10/21 16:36
S12 1	92279	(first and second) near signal	USPAT	æ	OFF.	2004/10/21 16:37
S12 2	14191	lead and lag	USPAT	S.	OFF	2004/10/21 16:37
S12 3	57	phase near error near generator	USPAT	æ	-OFF	2004/10/21 16:37
S12 4	226846	gain	USPAT	æ	OFF	2004/10/21 16:37
S12 5	65712	reference near signal	USPAT	æ	OFF	2004/10/21 16:37
S12 6	0	S120 and S121 and S122 and S123 and S124 and S125	USPAT	æ	OFF	2004/10/21 16:38

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2004/10/21 16:38	2004/10/21 16:38	2004/10/21 16:38	2004/10/21 16:38	2004/10/21 16:39	2004/10/21 16:39	2004/10/21 16:40	2004/10/21 16:40	2004/10/21 17:07	2004/10/25 09:54	2004/10/25 09:54	2004/10/25 09:56	2004/10/25 09:55	2004/10/25 09:55	2004/10/25 10:06	2004/10/25 09:57	2004/10/25 09:57	2004/10/25 10:06	2004/10/25 10:24	2004/10/25 10:25	2004/10/25 10:25	2004/10/25 10:26	2004/10/25 10:27
OFF	OFF .	OFF	OFF.	OFF	OFF	OFF.	OFF	OFF.	PF0	OFF	OFF	PF	OFF	OFF	OFF	PF.	OFF.	OFF	OFF	PF.	OFF.	OFF
S.	R	ĸ	R	g	æ		ä	S S	R	8	ĸ	8	æ	8	æ	æ	S.	S.	æ	R	g	OR
USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT
S120 and S121 and S122 and S123	S120 and S122 and S123 and S124 and S125	S120 and S121	S129 and S122	S130 and S123	S130 and S124	S132 and S125	S133 and voltage near controlled near oscillator	pll and gain near controller and vco	phase near locked near loop	phase near error near generator	S136 and S137	gain near signal	S138 and S139	(phase or frequency) near generator	S138 vand S141	S138 and S141	(phase or frequency) near detector	S138 and S144	phase near error	S136 and S146 and S144	S136 and S144	S147 and S139
0	0	2303	412	0	205	120	95	8	21072	57	24	11984	7	15560	15732	12	17972	12	10700	2125	6474	163
S12 7	S12 8	S12 9	S13 0	S13	S13	S13	S13	S13 5	S13 6	S13	S13	S13	S14 0	S14 1	S14 2	S14 3	S14 4	S14 5	S14 6	S14 7	S14 8	S14 9

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S15 0	8456	charge near pump	USPAT	æ	쁑	2004/10/25 10:27
S15 1	98	S149 and S150	USPAT	ĕ	OFF	2004/10/25 10:50
S15 2	15162	8	USPAT	R	OFF	2004/10/25 10:27
S15 3	4	S151 and S152	USPAT	8	FF.	2004/10/25 10:27
S15	2082	S136 and S146 and S152	USPAT	ĕ	PP.	2004/10/25 10:29
S15 5	515	S154 and S150	USPAT	ĕ	PF.	2004/10/25 10:29
S15 6	П	phase near locked near loop and (phase and frequency) near detector and (phase near error near generator)	USPAT	క	OFF	2004/10/25 11:05
S15 7	12	S136 and S137 and S144	USPAT	æ	OFF	2004/10/25 11:06
S15 8	21072	phase near locked near loop	USPAT	R	胀	2004/10/25 13:06
S15 9	14191	lag and lead	USPAT	æ	FF.	2004/10/25 13:06
S16 0	2854	phase near error near signal	USPAT	8	PF0	2004/10/25 13:06
S16 1	52	phase near error near generator	USPAT	g	OFF	2004/10/25 13:06
S16 2	0	S158 and S159 and S161	USPAT	ĕ	OFF	2004/10/25 13:07
S16 3	174	S158 and S159 and S160	USPAT	8	FF.	2004/10/25 14:01
S16 4	56	S163 and (phase and frequency) near detector	USPAT	æ	OFF.	2004/10/25 14:00
S16 5	174	S163 and S160	USPAT	ğ	PFO	2004/10/25 14:26
S16 6	242	(lead and lag) near (input or signal)	USPAT	8	FF0	2004/10/25 14:27
S16 7	11	S158 and S166 and S160	USPAT	R	OFF	2004/10/25 14:39
S16 8	30	(lead and lag) near input	USPAT	ĕ	HO	2004/10/25 14:39
S16 9	0	S158 and S168 and S160	USPAT	8	OFF.	2004/10/25 14:40
S17 0	E	S158 and S168 and phase near error	USPAT	ő	PF0	2004/10/25 15:16
S17 1	475	S158 and S159 and error near signal	USPAT	8	P.	2004/10/25 15:21

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S17 2	92	S171 and S164	USPAT	8	FF.	2004/10/25 15:33	
\$17 3	515	(phase/frequency) near detector	USPAT	Ř	PFO	2004/10/25 15:33	
S17 4	39	S160 and S158 and S173	USPAT	ĕ	FFO	2004/10/25 16:09	
S17 5	0	"phase error" same "lead and lag"	USPAT	8	OFF.	2004/10/25 16:11	
S17 6	0	"phase error" same "lead error signal"	USPAT	Ř	OFF	2004/10/25 16:12	
S17 7	208	"phase error" same "lead"	USPAT	8	OFF.	2004/10/25 16:12	
S17 8	389	"phase error" same "lag"	USPAT	ĕ	OFF	2004/10/25 16:13	
S17 9	174	S158 and S177 and S178	USPAT	Ř	OFF	2004/10/25 16:14	
S18 0	0	S179 and S161	USPAT	Ř	OFF	2004/10/25 16:14	
S18 1	. 12	S179 and S164	USPAT	8	OFF.	2004/10/25 16:14	

# Ref	吾	Search Query	DBs	Default Operator	Plurals	Time Stamp
S	21107	phase near locked near loop	USPAT	ĕ	OFF	2004/10/28 16:58
S	9401	phase near comparator	USPAT	క	OFF	2004/10/28 16:58
ន	454	S1 and S2	USPAT	ಕ	OFF	2004/10/28 16:58
ኧ	14204	lead and lag	USPAT	æ	OFF	2004/10/28 16:58
SS	370	S3 and S4	USPAT	Ŗ	OFF	2004/10/28 16:58
፠	10714	phase near error	USPAT	æ	OFF	2004/10/28 16:58
S2	168	S5 and S6	USPAT	æ	OFF	2004/10/28 16:59
8	21509	error same generator	USPAT	æ	OFF	2004/10/28 16:59
S	69	S7 and S8	USPAT	æ	A-FI	2004/10/28 17:06
210	3050	(first and second) near gain	USPAT	ğ	OFF	2004/10/28 17:07
S11	7	S7 and S10	USPAT	æ	OFF	2004/10/28 17:07
212	227104	gain	USPAT	ĕ	OFF	2004/10/28 17:19
S13	ድ	S7 and S12	USPAT	ĕ	OFF	2004/10/28 17:19
S14	17143	control same reference same gain	USPAT	క	HO.	2004/10/28 17:20
S15	8	S13 and S14	USPAT	g	OFF	2004/10/28 17:20
S16	15189		USPAT	æ	OFF	2004/10/28 17:20
217	72	S15 and S16	USPAT	Ŗ	OFF	2004/10/28 17:20
S18	9401	phase near comparator	USPAT	ğ	OFF	2004/11/01 11:33
S19	14399	phase near detector	USPAT	క	윤	2004/11/01 11:33
S20	227104	gain	USPAT	క	표	2004/11/01 11:33
221	1703415	control	USPAT	క	OFF	2004/11/01 11:34
222	2360553	reference	USPAT	g	OFF	2004/11/01 11:34
273	15189	000	USPAT	ğ	OFF.	2004/11/01 11:34
S24	19059	II.	USPAT	æ	OFF	2004/11/01 11:34
S25	339	S18 and S19 and S20 and S21 and S22 and S23 and S24	USPAT	ĕ	OFF	2004/11/01 11:34
S26	12001	gain near signal	USPAT	ଞ	OFF	2004/11/01 11:34
252	14204	lead and lag	USPAT	S,	OFF	2004/11/01 11:34
S28	22	S25 and S27	USPAT	8	OFF	2004/11/01 11:51
S29	65772	reference near signal	USPAT	g	PF	2004/11/01 11:54
83	332363	error	USPAT	g	OFF	2004/11/01 11:54
231	230598	control near signal	USPAT	S.	OFF	2004/11/01 11:54
232	65772	reference near signal	USPAT	S S	OFF	2004/11/01 11:55
R	4	S18 and S23 and S24 and S26 and S27 and S29 and S30 and S31 and S32	USPAT	8	OFF	2004/11/01 12:03
83	10714	phase near error	USPAT	S)	OFF	2004/11/01 12:04

2004/11/01 12:04

OFF

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S24 and S23 and S27 and S34 and USPAT S26

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Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	28006	pll or (phase near locked near loop)	USPAT	OR	OFF	2004/10/21 15:47
S2	10700	phase near error	USPAT	OR	OFF	2004/10/21 16:01
S3	193763	gain and reference	USPAT	OR	OFF	2004/10/21 15:47
S4	1818	(gain and reference and control) near signal	USPAT	OR	OFF	2004/10/21 15:48
S5	19823	voltage near controlled near oscillator	USPAT	OR	OFF	2004/10/21 15:48
S6	114	S1 and S2 and S4 and S5	USPAT	OR	OFF	2004/10/21 15:49
S7	14191	lead and lag	USPAT	OR	OFF	2004/10/21 15:52
S8	9	S6 and S7	USPAT	OR	OFF	2004/10/21 15:52
S9	23436	gain and reference near signal	USPAT	OR	OFF	2004/10/21 16:01
S10	384	S1 and S7 and S9	USPAT	OR	OFF	2004/10/21 16:04
S11	.377	S10 and control	USPAT	OR	OFF	2004/10/21 16:04